



**TRANSFER PATHWAY
(For Transfer to National University)
ASSOCIATE OF SCIENCE TO
BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

Catalog Year 2021-2022 You may use this pathway if you entered Dallas College on or before this date.

Career Path Engineering, Technology, Mathematics and Sciences

Available at All Campuses

TSI Must be Complete

SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS

This is an example course sequence for students interested in pursuing Computer Engineering. Although there may be several options to fulfill certain requirements for the associate's degree, please note that this pathway lists the specific courses leading to this bachelor's degree. All plans can be modified to fit the needs of part-time students. This is not an official degree plan. Refer to catalog for official degree requirements. You must receive a GPA of at least 2.00 on all college-level course work. Students must earn at least 25% of the credit hours required for graduation through instruction by Dallas College. Contact your advisor for information.

AS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS

PATHWAY REQUIREMENTS

Total Hours: 10

The following are prerequisite courses for MATH 2413: **MATH 1314, MATH 1316 and MATH 2412**

CONSIDER COMPLETING BEFORE TRANSFER

ENGR 2306 OR ENGR 2305

SEMESTER 1

Total Hours: 16

ENGL 1301 – Composition I *This is a (CB 010) Core course. Must earn a grade of "C" or higher.*

HIST 1301 – United States History I *This is a (CB 060) Core course.*

MATH 2413 – Calculus I *This is a (CB 020) Core course. Must earn a grade of "C" or higher. Prerequisites of MATH 1314, MATH 1316, MATH 2412, prior to enrolling in the course. There are several options to fulfill this requirement. Contact your academic advisor for a specific list.*

EDUC 1300 – Learning Framework *All college students with fewer than 12 semester credit hours of successful college credit (grade of "C" or above) must take a student success course in the first semester.*

CHOOSE ONE: **ARTS 1303** – Art History I **OR**
HUMA 1315 – Fine Arts Appreciation **OR**

MUSI 1306 – Music Appreciation *These are (CB 050) Core courses. There are several options to fulfill this requirement. Contact your academic advisor for a specific list.*

SEMESTER 2

Total Hours: 13-14

ENGL 1302 – Composition II *This is a (CB 010) Core course.*

MATH 2414 – Calculus II*

CHOOSE ONE: **COSC 1436** – Programming Fundamentals I* **OR**
MATH 2305 – Discrete Mathematics*

CHOOSE ONE: **HIST 1302** – United States History II **OR**

HIST 2301 – Texas History *These are (CB 060) Core courses. There are several options to fulfill this requirement. Contact your academic advisor for a specific list.*

*There are several options to fulfill this requirement. Contact your academic advisor for a specific list. Elective courses should be selected according to the intended university to which you will transfer. Contact your academic advisor for assistance with course selection.

SEMESTER 3

Total Hours: 7

GOVT 2305 – Federal Government *This is a (CB 070) Core course.*

PHYS 2425 – University Physics I *This is a (CB 030) Core course. There are several options to fulfill this requirement. Contact your academic advisor for a specific list.*

SEMESTER 4

Total Hours: 13-15

GOVT 2306 – Texas Government *This is a (CB 070) Core course.*

PHYS 2426 – University Physics II *This is a (CB 030) Core course. There are several options to fulfill this requirement. Contact your academic advisor for a specific list.*

COSC 1437 – Programming Fundamentals II*

CHOOSE ONE: **ENGR 1201** – Introduction to Engineering* **OR**
MATH 2415 – Calculus III* **OR**
COSC 2425 – Computer Organization*

*There are several options to fulfill this requirement. Contact your academic advisor for a specific list. Elective courses should be selected according to the intended university to which you will transfer. Contact your academic advisor for assistance with course selection.

SEMESTER 5

Total Hours: 14

COSC 2436 – Programming Fundamentals III*

ECON 2301 – Principles of Macroeconomics* *This is a (CB 080) Core course.*

PHED 1164 – Introduction to Physical Fitness and Wellness* *This is a (CB 090) Core course.*

CHOOSE ONE: **ENGL 2331** – World Literature* *This is a (CB 040) Core course.* **OR**
PHIL 1301 – Introduction to Philosophy* *This is a (CB 040) Core course.* **OR**
PHIL 1306 – Introduction to Ethics* *This is a (CB 040) Core course.*

CHOOSE ONE: **SPCH 1321** – Business and Professional Communication* *This is a (CB 090) Core course.* **OR**
SPCH 1315 – Public Speaking* *This is a (CB 090) Core course.*

*There are several options to fulfill this requirement. Contact your academic advisor for a specific list. Elective courses should be selected according to the intended university to which you will transfer. Contact your academic advisor for assistance with course selection.

**NATIONAL UNIVERSITY
(For Transfer From Dallas College)
ASSOCIATE OF SCIENCE TO
BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS

For questions about the National University portion of this transfer pathway, contact the **Academic Advising Office at (855) 355-6288 or advisor@nu.edu**. It is best to apply to National University a full semester before you plan to transfer. It will help if you submit a copy of this pathway with your application. Each class at National University is one month (4 weeks) long. Students take one class per month. Students can complete 6 courses during each semester. Each class is 4.5 quarter units, which is equivalent to 3 semester units at Dallas College.

SEMESTER 1

Total Hours: 27 quarter units

CSC 209 – Calculus for Comp Science II (4 weeks)
CSC 220 – Applied Probability & Statistics (4 weeks)
CSC 300 – Object Oriented Design (4 weeks)
CSC 350 – Computer Ethics (4 weeks)
EGR 320 – Scientific Problem Solving (4 weeks)
CSC 310 – Linear Algebra and Matrix Comp (4 weeks)

SEMESTER 2

Total Hours: 24 quarter units

CSC 331 – Discrete Structures and Logic (4 weeks)
CSC 335 – Data Structures and Algorithms (4 weeks)
CSC 338 – Algorithm Design (4 weeks)
CSC 340 – Digital Logic Design (4 weeks)
CSC 340L – Digital Logic Design Lab (1.5 quarter units, 4 weeks)
CSC 342 – Computer Architecture (4 weeks)

SEMESTER 3

Total Hours: 27 quarter units

CSC 400 – OS Theory and Design (4 weeks)
CSC 422 – Database Design (4 weeks)
CSC 436 – Comp. Communication Networks (4 weeks)
CSC 430 – Programming Languages (4 weeks)
CSC 480A – Computer Science Project I (4 weeks)
CSC 480B – Computer Science Project II (4 weeks)

SEMESTER 4

Total Hours: 22.5 quarter units

CSC 480C – Computer Science Project III (4 weeks)
ITM 470 – Information Security Management (4 weeks)
One Course Approved Elective (4 weeks)
One Course Approved Elective (4 weeks)
***One Upper Division General Education Course** (4 weeks)

*Please see program catalog for the BSCS Upper Division Elective and Upper Division General Education courses.

TOTAL UNITS TO COMPLETE

Total Hours: 100.5 quarter units

Note: In addition to Preparatory, Major Core, and Upper Division/Concentration Courses for the **Bachelor of Science in Computer Science** at National University, all students are required to complete 70.5 quarter units of General Education. Students completing the **Associate of Science with a focus in Computer Engineering** at Dallas College will need to complete an additional estimated 27 quarter units (18 semester units) of GE to meet program and unit requirements. For more information, please see National University's catalog: <https://www.nu.edu/catalog/>